A new Tetropium, two new Bruchides, with brief notes on other Coleoptera.

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The following undescribed and very distinct species of *Tetropium* has recently been sent me by Mr. Ralph Hopping of the Forestry Service in the Sequoia National Park of California, with the statement that it is very destructive to both white and red fir (*Abies concolor* and *A. magnifica.*) Mr. Hopping requests that it be given a name in order that he may better refer to it in a forthcoming report.

Tetropium abietis n. sp.

Dark brown varying to pale brown, but concolorous throughout. Head and prothorax shining and not densely pubescent, the former numerously simply punctate with distinct median sulcus, the latter quite strongly granulate punctate, and with a strongly marked suboval impression, which is narrowly smooth and slightly elevated at middle posteriorly. Elytra obviously wider than the prothorax, parallel or slightly narrowed posteriorly, with the usual fine and short appressed pubescence; luster dull, the discal raised lines distinct but fine; sculpture exceedingly fine, subgranulose or asperate punctate. Beneath shining, finely punctate, and with longer sparser pubescence. Length, 13—17 mm.; width, 3.5—4.5 mm.

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Male: Antennae about five-sixths as long as the body, slender, all joints linear or nearly so, second slightly gradually wider apically, twice as long as wide; third nearly or quite twice as long as the second and more than four times as long as wide. Prothorax varying from distinctly transverse to barely perceptibly so, subangularly rounded at or a little in advance of the middle; femora stout; pygidium

obliquely narrowed behind, the apex rather broadly truncate.

Female: Antennæ scarcely longer than half the body, a little more slender than in the male but similarly formed; prothorax with sides more evenly rounded; femora less stout; pygidium with apex broadly

evenly rounded in nearly circular arc.

Described from a series of a dozen specimens taken at Huckleberry Meadow, Fresno Co., California, all bearing date July 19, 1910. This is the most strongly characterized *Tetro-pium* in our fauna, and at once distinguished from all others by its granulose sculpture and the strong oval prothorac impression, the latter somewhat suggestive of *Nothorina*.

Bruchus julianus Horn.

This species was described in 1894 from San Julio and San Ignacio, Texas. Later, larger specimens from Brownsville were held to be identical and so distributed, and upon these

my conception of the species was based. Mr. Wenzel now announces—*Ent. News*, 1912, p. 140—that a series taken recently by H. A. Wenzel in Western Texas are typical *julianus* and quite distinct from the Brownsville species. Specimens sent to me by Mr. Wenzel prove to be my recently described *ochreolineatus*, which name therefore falls into synonymy, This leaves the big Brownsville species without a name, and I would propose for it the specific name

Bruchus major n. sp.

The two species are much alike in structure and markings, but the ochreous lines of pubescence on the elytra of the smaller species are more conspicuous, the second antennal joint is relatively shorter as compared with the third, and the number of blackish joints of the antennæ is two or three greater than in major. Julianus, according to Mr. Wenzel, is always found on a low shrub near the ground, while major breeds abundantly in the seed pods of the tree Acacia flexicaulis.

The two following species were represented in my collection at the time of my recently published tables of *Bruchus*.* The first was held back thinking it might possibly have been described from Cuba, and the second was known to me only by a unique specimen. Recently Mr. Schwarz has seen the Florida specimens and pronounced them different from anything known to him from either Cuba or Mexico; and of the second I have just received additional specimens from Dr. Blaisdell.

Bruchus depressus n. sp.

Form strongly depressed, black, shining, lateral half of elytra red, varying through the reduction of the red area to entirely black; antennæ black, basal four or five joints pale; legs entirely red, or with the hind thighs blackish at extreme base; pubescence thin, short and inconspicuous, ochreo-cinereous in color. Antennæ moderately increassate; fifth joint as long as wide, following moderately transverse. Eyes separated by about their own width as viewed from the front; head finely closely punctate; front feebly obtusely carinate. Prothorax subconical, wider than long, impressed before the scutellum, rather coarsely and closely punctate with intermixed finer punctures.

Elytra as long as wide; sides parallel and broadly evenly arcuate, depressed along the suture; striae rather strong and strongly punctate

^{*} Trans. Am. Ent. Soc. XXXVI, 1910, p. 160.

basally, intervals subrugose and each with a somewhat irregular and indistinct series of coarser punctures. Pygidium oblique, rather coarsely and closely but not deeply punctured. Hind thighs armed with a single long acute tooth on the inner margin; terminal spur of hind tibiæ very short, not longer than the other marginal denticles. Length, 2—2.2 mm.; Withdth, 1.2—1.35 mm.

Florida (Orlando?). Three examples bearing date March 14, 1894, collected and given me by Mr. Frank S. Daggett. This species belongs to Horn's Group V, and in my recently published table may best follow *discopterus*, differing in its even more depressed form, more shining surface, dark antennae and differences in elytral coloration.

Bruchus brunneostictus n. sp.

Form of pauperculus, pullus and allies, and agreeing in all respects with pullus except as follows: Size much larger, the cinereous pubescence denser, the livid spots contrasting more strongly. In fully maculate specimens the spots are arranged in three transverse series on the elytra. Those of the apical series seem most likely to disappear, then the basal ones, and in one example there remains only the sublateral median spot external to the pale line on the third interspace, Length, 2.35—2.9 mm.

California. Alhambra Valley, Contra Costa Co. (Blaisdell), type. Santa Clara Co. (Baker.) This is possibly only a large and finely developed race of *pullus*, but I have seen no intermediates and it certainly seems worthy of a name.

Anillus.

In Blatchley's *Colcoptera of Indiana*, page 79, the author records the taking of two specimens of an *Anillus* identified by him as *A. fortis* Horn, from beneath stones on a wooded slope near Wyandotte Cave in the extreme southern part of the state. On the 15th of July, 1910, several specimens of *Anillus* were taken by Mr. Blatchley and the writer under precisely similar conditions near the town of Mitchell, Indiana, about one hundred miles south of Indianapolis. These, as we expected, proved to be identical with the Wyandotte examples. On returning to California and comparing my captures with specimens of *fortis* from North Carolina, it became evident at once that the Indiana species was something else. On investigation it was found to agree well with the description of *A. affabilis* Brues* from Austin, Texas, and a recent direct comparison with Mr. Brues' types shows

^{*} Am. Naturalist XXXVI, p. 366.

that the two forms are too close to separate with safety. Mr. Brues has very generously placed in my collection one of the three specimens from which his description was drawn. This specimen is evidently of narrower form than any of the Indiana ones but, if my memory serves me, it is also more slender than either of his two remaining types; the difference therefore is likely to be sexual or possibly merely individual. Aside from it, there is scarcely anything to distinguish the Indiana specimens from the Texan ones.

Hyperaspis wolcotti Nunenmacher, Ent. News, 1911, p. 73.

This is a *Hyperaspidius*. A series sent me by Mr. Wolcott shows great variation in color. The species seems to be distinct from any previously described *Hyperaspidius*, but of this I am not entirely sure.

Lytta (Cantharis) nunenmacheri Wellman, Ent. News, 1912, p. 36. Typical specimens kindly sent me by Mr. Nunenmacher show that this is precisely Cantharis incommoda Horn. No reference is made by the author to the important sexual characters, a knowledge of which is necessary in order to place the species in our present tables. The comparison with blaisdelli is apropos for no other reason than that the two species occur in the same region, since they belong to two different sections of the genus.

Lytta arborea Wellm. ibid, p. 34.

A specimen of this from Mr. Nunenmacher, who collected the type series, indicates a species closely allied to *stygica*. It is smaller and more slender than any specimen of *stygica* in my collection, but otherwise possesses scarcely anything in the way of definite characters. I cannot believe that the occurrence of the specimens on trees has any special significance. Any species of *Cantharis* is likely to, and many certainly do, climb to considerable heights on plants and bushes Lytta hoppingi Wellm, ibid p. 35.

This species should be placed near *lugens* in our tables. It is structurally quite similar, but is very distinct and at once recognizable by the color, and the very narrow, shining, sparsely punctured thorax. I owe a good series to the kindness of Mr. Hopping.